identifying user defined trends including identifying trends within segments by analyzing structures of a plurality of marketing campaigns in chronological order.

Remarks

The Office Action mailed April 18, 2002 has been carefully reviewed and the foregoing amendment has been made in consequence thereof. Submitted herewith is a Submission of Marked Up Claims.

In accordance with 37 C.F.R. 1.136(a), a two-month extension of time is submitted herewith to extend the due date of the response to the Office Action dated April 18, 2002 for the above-identified patent application from July 18, 2002 through and including September 18, 2002. In accordance with 37 C.F.R. 1.17(a)(2), authorization to charge a deposit account in the amount of $400.00 to cover this extension of time request also is submitted herewith.

Claims 1-20 are pending in this application. Claims 1-19 stand rejected. Claim 20 has been newly added.

In addition, and in accordance with 37 C.F.R. 1.136(a), a two month extension of time is submitted herewith to extend the due date of the response to the Office Action dated April 18, 2002, for the above-identified patent application from July 18, 2002, through and including September 18, 2002. In accordance with 37 C.F.R. 1.17(a)(3), authorization to charge a deposit account in the amount of $400.00 to cover this extension of time request also is submitted herewith.

The objections to Claims 1, 7, 9 and 10-19 are respectfully traversed.

The objections to Claims 1, 7 and 9 for the informalities described in the Office Action are respectfully traversed. Applicants have amended Claims 1, 7 and 9. Accordingly, Applicants respectfully request that the objections to Claims 1, 7 and 9 for the informalities described in the Office Action be withdrawn.

The objection to Claims 10-19 under 37 C.F.R. 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim, is respectfully traversed. Claims 10-19 depend, directly or indirectly, from independent Claim 9. Claims 9-19 have been amended such that Claims 10-19 depend from independent Claim 9 and are in proper dependent form. Accordingly, Applicants respectfully request that the objection to Claims 10-19 under 37 C.F.R. 1.75(c) be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the objections to Claims 1, 7, 9 and 10-19 be withdrawn.

The rejection of Claims 1-19 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. Applicants respectfully submit that Claims 1-19 satisfy Section 112, second paragraph. Claims 1, 7 and 9-19 have been amended. Applicants respectfully submit that one skilled in the art, after reading the specification in light of the Figures, would understand Claims 1-19. Applicants therefore respectfully submit that Claims 1-19 are definite and contain subject matter that is supported by the specification in such a way as to enable one skilled in the art to make and/or use the invention. Accordingly, Applicants respectfully request that the rejection of Claims 1-19 under Section 112, second paragraph, be withdrawn.

The rejection of Claims 1-19 under 35 U.S.C. § 102(e) as being anticipated by Verba et al. (U.S. Patent No. 6,236,977) ("Verba") is respectfully traversed.

Verba describes a computer-implemented self-optimizing marketing system that includes a campaign engine (20) for selectively generating and storing a campaign population (50), a customer population data store (66) for storing a customer population (30), and an optimization engine (24). Campaign population (50) has members representing a plurality of marketing campaigns wherein each campaign is characterized by a plurality of campaign attributes that includes a plurality of campaign activities. Campaign engine (20) assembles campaign population members from the campaign activities. Customer population (30) has members

5

representing a plurality of customers and potential customers that are characterized by a plurality of customer attributes. Optimization engine (24) accesses campaign population (50) and customer population (30) to optimize at least one of campaign population (50) and customer population (30). Optimization engine (24) includes a scoring system (73) for ordering the members of at least one of campaign population (50) and customer population (30) such that a set of offers to buy and offers to sell the same resource is created.

Claim 1 recites a method of evaluating marketing campaign data wherein the data is in the form of database scores, stored procedures, and On Line Analytical Processing (OLAP) multidimensional structures, such that the method includes the steps of "evaluating models using structures that segment gains charts to discover where a model is under performing...and evaluating the model's performance over time and discovering user defined trends."

Although Verba does describe at column 2, lines 50-54 marketing systems that provide for a feedback loop between outbound campaigns and inbound campaigns such that the results of inbound campaigns can be used to monitor and improve the effectiveness of outbound campaigns, Verba does not describe nor suggest a method of evaluating marketing campaign data that includes the steps of evaluating models using structures that segment gains charts to discover where a model is under performing, and evaluating the model's performance over time and discovering user defined trends.

More specifically, Verba does not describe nor suggest a method of evaluating marketing campaign data that includes evaluating models to discover where a model is under performing, nor does Verba describe nor suggest evaluating a model's performance over time and discovering user defined trends. Rather, Verba describes a computer-implemented self-optimizing marketing system that includes a campaign engine for selectively generating and storing a campaign population, a customer population data store for storing a customer population, and an optimization engine that includes a scoring system for ordering the members of at least one of the campaign population and customer population such that a set of offers to

buy and offers to sell the same resource is created. The system also includes a prediction engine that processes historical data to predict how campaigns can best match buyer to seller.

In contrast, the present invention describes a method of evaluating marketing campaign data that includes evaluating models using structures that segment gains charts to discover where a model is under performing, and evaluating the model's performance over time and discovering user defined trends. Verba does not describe nor suggest a method of evaluating marketing campaign data as recited in Claim 1. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Verba.

For at least the reasons set forth above, Applicants respectfully request that the 35 U.S.C. § 102(e) rejection of Claim 1 be withdrawn.

Claims 2-8 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-8 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-8 likewise are patentable over Verba.

Claim 9 recites a system for evaluating marketing campaign data that includes a customer database that further includes historical campaign results, a graphical user interface for presentation of trend analysis data, and "a targeting engine configured to evaluate models and define trends relating to the marketing campaign data."

Verba does not describe nor suggest a system for evaluating marketing campaign data that includes a targeting engine configured to evaluate models and define trends relating to the marketing campaign data. Rather, Verba describes a computer-implemented self-optimizing marketing system that includes a campaign engine for selectively generating and storing a campaign population, a customer population data store for storing a customer population, and an optimization engine that includes a scoring system for ordering the members of at least one of the campaign population and customer population such that a set of offers to buy and offers to

7

sell the same resource is created. The system in Verba also includes a prediction engine that processes historical data to predict how campaigns can best match buyer to seller.

Although Verba does mention at column 10, lines 41-43 that a feedback loop allows the prediction engine to learn to predict which leads actually are likely to become referrals and customers, in contrast to the present invention, Verba does not describe nor suggest a system for evaluating marketing campaign data that includes evaluating models and defining trends relating to the marketing campaign data. Accordingly, Applicants respectfully submit that Claim 9 is patentable over Verba.

For at least the reasons set forth above, Applicants respectfully request that the 35 U.S.C. § 102(e) rejection of Claim 9 be withdrawn.

Claims 10-19 depend, directly or indirectly, from independent Claim 9. When the recitations of Claims 10-19 are considered in combination with the recitations of Claim 9, Applicants submit that dependent Claims 10-19 likewise are patentable over Verba.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-19 be withdrawn.

The rejection of Claims 8 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Verba et al. (U.S. Patent No. 6,236,977) ("Verba") in view of Barry de Ville, Direct Marketing with ModelMax, Marketing Research (Spring 1996) ("De Ville"), is respectfully traversed.

Verba is described above. De Ville describes a neural network modeling software known as ModelMax, which is used to develop predictive models in direct and database marketing tasks. (See De Ville, page 56). ModelMax is a computer software that automates many of the tasks, such as target mailings, involved in conducting direct marketing campaigns. (See De Ville, page 56). ModelMax uses seven steps to construct a direct mailing campaign that include: (i) a host data set that includes results from previous campaigns, purchase behavior, and other

8

customer characteristics; (ii) a training sample that is selected from the host data set to grow a neural model; (iii) a validation sample that is drawn from the host data set to test reproducibility and accuracy of the neural model; (iv) a neural model for selecting strong predictors and eliminating redundant predictors; (v) a validation of the predictive model to evaluate whether the model is likely to yield good results in a live direct marketing campaign; (vi) a scoring that calculates the predictive probability of purchase for each record on the host data set; and (vii) a profiling that evaluates the performance of the campaign. (See De Ville, pages 57-58).

Claim 8 depends from independent Claim 1, which recites a method of evaluating marketing campaign data wherein the data is in the form of database scores, stored procedures, and On Line Analytical Processing (OLAP) multidimensional structures, such that the method includes the steps of "evaluating models using structures that segment gains charts to discover where a model is under performing…and evaluating the model's performance over time and discovering user defined trends."

Neither Verba nor De Ville, considered alone or in combination, describe nor suggest a method of evaluating marketing campaign data that includes the steps of evaluating models using structures that segment gains charts to discover where a model is under performing, and evaluating the model's performance over time and discovering user defined trends. Rather, Verba describes a computer-implemented self-optimizing marketing system that includes a campaign engine for selectively generating and storing a campaign population, a customer population data store for storing a customer population, and an optimization engine that includes a scoring system for ordering the members of at least one of the campaign population and customer population such that a set of offers to buy and offers to sell the same resource is created. Verba does not describe nor suggest evaluating models using structures that segment gains charts to discover where a model is under performing, nor does Verba describe nor suggest evaluating the model's performance over time and discovering user defined trends.

9

To the extent understood, De Ville describes a neural network modeling software known as ModelMax that is used to automate many of the tasks, such as target mailings, involved in conducting direct marketing campaigns, and includes a validation of a predictive model to determine whether the model is likely to yield good results in a live direct marketing campaign. In contrast to the present invention, however, De Ville does not describe nor suggest evaluating models using structures that segment gains charts to discover where a model is under performing, nor does De Ville describe nor suggest evaluating the model's performance over time and discovering user defined trends.

Neither Verba nor De Ville, considered alone or in combination, describe or suggest a method of evaluating marketing campaign data as recited in Claim 1. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Verba in view of De Ville.

Claim 8 depends from independent Claim 1. When the recitations of Claim 8 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claim 8 likewise is patentable over Verba in view of De Ville.

Claim 19 depends from independent Claim 9, which recites a system for evaluating marketing campaign data that includes a customer database that further includes historical campaign results, a graphical user interface for presentation of trend analysis data, and "a targeting engine configured to evaluate models and define trends relating to the marketing campaign data."

Neither Verba nor De Ville, considered alone or in combination, describe nor suggest a system for evaluating marketing campaign data that includes a targeting engine configured to evaluate models and define trends relating to the marketing campaign data. Accordingly, Applicants respectfully submit that Claim 9 is patentable over Verba in view of De Ville.

Claim 19 depends from independent Claim 9. When the recitations of Claim 19 are considered in combination with the recitations of Claim 9, Applicants submit that dependent Claim 19 likewise is patentable over Verba in view of De Ville.

Notwithstanding the above, the rejection of Claims 8 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Verba in view of De Ville is further traversed on the grounds that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Verba using the teachings of De Ville. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Neither Verba nor De Ville, considered alone or in combination, describe nor suggest the claimed combination. Rather, the present Section 103 rejection appears to be based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Verba is cited for teaching a database modeling system where different kinds of information can be input to and read from the system. To the extent understood, however, Verba actually teaches a computer-implemented self-optimizing marketing system that includes a campaign engine for selectively generating and storing a campaign population, a customer population data store for storing a customer population, and an optimization engine that includes a scoring system for ordering the members of at least one of the campaign population and customer population such that a set of offers to buy and offers to sell the same resource is created.

De Ville is cited for teaching a direct marketing campaign evaluation software product called ModelMax where the "primary validation tool provided by ModelMax is the lift or gains chart." To the extent understood, however, De Ville actually teaches a neural network modeling software known as ModelMax, which is used to automate many of the tasks, such as target mailings, involved in conducting direct marketing campaigns, and includes a validation of a predictive model to evaluate whether the model is likely to yield good results in a live direct marketing campaign.

Since there is no teaching nor suggestion for the combination of Verba and De Ville, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection of Claims 8 and 19 be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of Claims 8 and 19 be withdrawn.

12

The rejection of Claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Verba et al. (U.S. Patent No. 6,236,977) ("Verba") in view of Microsoft Press Computer Dictionary Third Ed., "Definition of OLAP" (1997) ("Microsoft"), is respectfully traversed.

Verba is described above. Microsoft defines "OLAP database" as "a relational database system capable of handling queries more complex than those handled by standard relational databases, through multidimensional access to data (viewing the data by several different criteria), intensive calculation capability, and specialized indexing techniques." (See Microsoft, page 339). Microsoft does not, however, describe nor suggest a system for evaluating marketing campaign data that includes a targeting engine configured to evaluate models and define trends relating to the marketing campaign data.

Claim 10 depends from independent Claim 9, which recites a system for evaluating marketing campaign data that includes a customer database that further includes historical campaign results, a graphical user interface for presentation of trend analysis data, and "a targeting engine configured to evaluate models and define trends relating to the marketing campaign data."

Neither Verba nor Microsoft, considered alone or in combination, describe nor suggest a system for evaluating marketing campaign data that includes a targeting engine configured to evaluate models and define trends relating to the marketing campaign data. Rather, Verba describes a computer-implemented self-optimizing marketing system that includes a campaign engine for selectively generating and storing a campaign population, a customer population data store for storing a customer population, and an optimization engine that includes a scoring system for ordering the members of at least one of the campaign population and customer population such that a set of offers to buy and offers to sell the same resource is created. Microsoft merely defines an OLAP database. Accordingly, Applicants respectfully submit that Claim 9 is patentable over Verba in view of Microsoft.

13

Claim 10 depends from independent Claim 9. When the recitations of Claim 10 are considered in combination with the recitations of Claim 9, Applicants submit that dependent Claim 10 likewise is patentable over Verba in view of Microsoft.

Notwithstanding the above, the rejection of Claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Verba in view of Microsoft is further traversed on the grounds that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Verba using the teachings of Microsoft. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

14

Neither Verba nor Microsoft, considered alone or in combination, describe nor suggest the claimed combination. Rather, the present Section 103 rejection appears to be based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Verba is cited for teaching a database system that uses data structures for the storage and retrieval of various campaign data to monitor and improve the effectiveness of campaigns. To the extent understood, however, Verba actually teaches a computer-implemented self-optimizing marketing system that includes a campaign engine for selectively generating and storing a campaign population, a customer population data store for storing a customer population, and an optimization engine that includes a scoring system for ordering the members of at least one of the campaign population and customer population such that a set of offers to buy and offers to sell the same resource is created. Microsoft is cited for teaching an OLAP database.

Since there is no teaching nor suggestion for the combination of Verba and Microsoft, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection of Claim 10 be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of Claim 10 be withdrawn.

Newly added Claim 20 recites a method of evaluating marketing campaign data, the data being in the form of customer lists, database scores, stored procedures, and On Line Analytical Processing (OLAP) multidimensional structures, wherein the method includes "generating gains charts by comparing marketing campaign customer lists to corresponding marketing campaign results...evaluating models by using structures that segment gains charts to identify where a model is under performing...evaluating the model's performance over time and over a plurality

15

of marketing campaigns...and identifying user defined trends including identifying trends within segments by analyzing structures of a plurality of marketing campaigns in chronological order."

None of the art cited in the Office Action, considered alone or in combination, describe or suggest a method of evaluating marketing campaign data as recited in Claim 20. Accordingly, Applicants respectfully submit that Claim 20 is patentable over the cited art.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

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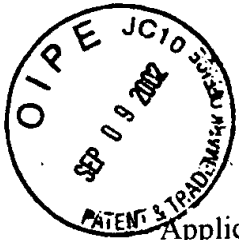
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Samra et al.   :
                                                  :   Art Unit: 2163
Serial No.: 09/474,631   :
                                                  :   Examiner: Eric T. Shaffer
Filed: December 29, 1999   :
                                                  :
For: METHODS AND SYSTEMS   :
        FOR ANALYZING   :
        HISTORICAL TRENDS IN   :
        MARKETING CAMPAIGNS   :

SUBMISSION OF MARKED UP CLAIMS

Hon. Commissioner for Patents
Washington, D.C. 20231

Submitted herewith are marked up Claims in accordance with 37 C.F.R. 1.121(c)(1)(ii).

IN THE CLAIMS

1. (once amended) A method of evaluating marketing campaign data, the data being in the form of database scores, stored procedures, and On Line Analytical Processing (OLAP) multidimensional structures, said method comprising the steps of:

evaluating models using structures that [can] segment gains charts to discover where a model is under performing; and

evaluating the model's performance over time and discovering user defined trends.

1

7. (once amended) A method according to Claim 1 wherein said step of evaluating the model's performance over time and discovering user defined trends further comprises the step of maintaining feedback into a targeting engine to improve subsequent modeling cycles.

9. (once amended) A system [configured to] for evaluating [evaluate] marketing campaign data, said system comprising:

a customer database further comprising historical campaign results;

a graphical user interface for presentation of trend analysis data; and

[and optimal] a targeting engine configured to evaluate models and define trends relating to the marketing campaign data [using models].

10. (once amended) A system according to Claim 9 wherein said targeting engine is further configured to evaluate models that are time based multidimensional On Line Analytical Processing (OLAP) history structures.

11. (once amended) A system according to Claim 9 wherein said targeting engine is further configured to discover user defined trends.

12. (once amended) A system according to Claim 9 wherein said targeting engine is further configured to determine where profitability has been changing over time.

13. (once amended) A system according to Claim 9 wherein said targeting engine is further configured to determine where a response rate has been changing over time.

14. (once amended) A system according to Claim 9 wherein said targeting engine is further configured to determine where a number of accounts are being closed.

15. (once amended) A system according to Claim 9 <u>wherein said targeting engine is</u> further configured to determine propensity of a customer to avail themselves to other products over time.

16. (once amended) A system according to Claim 9 <u>wherein said targeting engine is</u> further configured to check model performance of the model based on user defined criteria.

17. (once amended) A system according to Claim 9 <u>wherein said targeting engine is</u> further configured to analyze a particular population segment.

18. (once amended) A system according to Claim 9 <u>wherein said targeting engine is</u> further configured to maintain feedback [into a targeting engine] to improve subsequent modeling cycles.

19. (once amended) A system according to Claim 9 <u>wherein said targeting engine is</u> further configured to use gains charts to illustrate customer trends.

<u>Please add the following claim</u>:

20. (newly added) A method of evaluating marketing campaign data, the data being in the form of customer lists, database scores, stored procedures, and On Line Analytical Processing (OLAP) multidimensional structures, said method comprising the steps of:

generating gains charts by comparing marketing campaign customer lists to corresponding marketing campaign results;
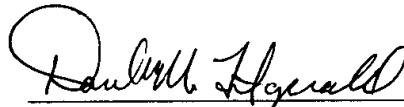
evaluating models by using structures that segment gains charts to identify where a model is under performing;

evaluating the model's performance over time and over a plurality of marketing campaigns; and

identifying user defined trends including identifying trends within segments by analyzing structures of a plurality of marketing campaigns in chronological order.

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4